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| 09/827,267   | 04/05/2001  | Hisao Furukawa       | B-4132 618659-5             | 4340             |
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| LADAS & PARRY<br>5670 WILSHIRE BOULEVARD, SUITE 2100<br>LOS ANGELES, CA 90036-5679 |             |                      | EXAMINER<br>LEVITAN, DMITRY |                  |
|  |             |                      | ART UNIT                    | PAPER NUMBER     |
|  |             |                      | 2616                        |                  |

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/827,267

Applicant(s)

FURUKAWA ET AL.

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 381-394, 398-400, 402-406, 413-415, 419-434 and 436-466 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 381-394, 398-400, 402-406, 413-415, 419-434 and 436-466 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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Amendment, filed 04/24/06, has been entered. Claims 381-394, 398-400, 402-406, 413-415, 419-434 and 436-466 remain pending.

### *Claim Objections*

1. In light of Applicant's amendment, the objections to the claims have been withdrawn.
2. Claim 451 is objected to because of typographical error on line 5.
3. Claim 442 is objected to because of typographical errors on line 2 and should read as "apparatuses".
4. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).  
The term "a handset ... IP telephone set is taken up" in claim 389 on line 6 is used by the claim to mean "take the phone off the hook". Applicant should use industry established terms to define the invention.

### *Claim Rejections - 35 USC § 112*

1. Claims 381-392, 393-395, 398-400, 405, 413, 414, 429, 432, 433, 434, 448-453, 458-466 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 381 recites the limitation "the call setting request" in line 6. There is insufficient antecedent basis for this limitation in the claim.

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3. Claim 381 limitations “a communication line for inter-terminal communication within said IP transfer network” is unclear, because the communication within IP network does not comprise “communication line”, which is typical for PSTN or other non-packet networks.
4. Claim 386 limitations “voice-moving image” is unclear, because it is not understood what is voice-moving image.
5. Claim 388 limitation “telephone number is terminal discrimination number to discriminate a receiving terminal” is unclear, because it is not understood what “discriminating a receiver terminal” means.
5. Claims 389, 393 and 394 limitations “dependent (in 389 and 393) and independent (in 394) type of apparatus” are unclear, because it is not understood what is a dependent/independent apparatus.
6. Claim 398 limitation “dependent type IP telephone” is unclear, because it is not understood what is dependency of this telephone.
7. Claim 405 limitation “a common port number of a plurality of telephone sets” is unclear, because it is not understood what device comprises ports and what is common port number for the plurality of telephones.
8. Claim 413 limitation “an IP communication record is set in order that a telephone communication is carried among preselected companies” is unclear, because it is not understood what are the criteria for the companies pre-selection.
9. Claim 413 limitations “closed-area telephone communication” are unclear because it is not understood what communications belong to closed-area and what are not.

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10. Claim 413 limitations “communication destinations of said closed-area telephone communication are limited” are unclear because it is not understood what is the limitation in the closed-area communication.

11. Claims 419, 430 and 431 limitation “a telephone communication is carried out between two telephone sets via telephone set 1...and a telephone set 2 in this order” are unclear, because it is not understood what “this order” means in the context of the claims: limiting calls only from set 1 to set 2 but not from set 2 to set 1 or something else.

12. Claim 421 recites the limitation "the relay control unit" in line 3. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 422 recites the limitation "the relay control unit" in line 3. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 424 limitations “a converting operation between an IP packet for storing digital voice and a voice signal which is transferred through a voice communication line of NNI communication line is carried out” is unclear as written.

15. Claim 425 limitations “a conversion operation between the IP packet and the signaling unit is carried out” is unclear, because it is not understood how a packet could be converted into a device/unit.

16. Claim 426 recites the limitation "the voice control unit" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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17. Claim 432 limitation: "determine a communication line for inter-terminal communication within the IP transfer network" is unclear because in contrast with switched networks, IP networks utilize routing without determining a communication line.

18. Claim 432 recites the limitations "the telephone calling side" in line 5 and "the call reception side" in line 9. There is insufficient antecedent basis for these limitations in the claim.

19. Claim 432 recites the limitation "the calling sound" in line 27. There is insufficient antecedent basis for this limitation in the claim.

20. Claims 458, 461 and 464 limitation "a step to decide an internal address" is unclear, because it is not understood what means "to decide an address".

21. Claim 400 limitation "a telephone connected to a media router provided in a LAN having a telephone number of a public switched telephone network; a combination of an address telephone number and a transfer gateway telephone number is set in a transfer processing unit of a switching machine" is unclear as written.

22. Claims 429, 434 limitations "a voice IP communication line" is unclear because it is not understood what is voice IP communication line in the context of the claim.

23. Claims 448, 451, 458, 461, 464 limitations "said network node apparatus respectively have two or more logical terminals, said network node apparatus are connected to terminals for communicating by using an external packet via said IP transfer network via said logical terminals," are not understood, because it is unclear how all the terminals and nodes are connected and related to the network.

24. Claim 434 limitations "a simple encapsulation method" are unclear. Because it is not understood what encapsulation methods are considered simple and what are not.

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25. Claim 434 recites the limitation "the end of the IP communication line" in line 5. There is insufficient antecedent basis for this limitation in the claim.

26. Claim 434 recites the limitation "the network node apparatus side" in line 6. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

27. Claim 406 and 442 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (US 6,069,890) in view of Edholm (US 6,449,269) and Black (ISDN and SS7, Prentice Hall, 1997, pages 223-248).

White substantially teaches the limitations of the claim:

White teaches terminal-to-terminal communication control method with IP network (IP based telephone system on Fig. 4 and 4:5-25), comprising call set (telephones 100 and 118 on Fig. 4 and 8:21-44), call reception, process and response carried in the IP network (steps 126-160 VoIP telephone process, shown on Fig. 5) and a service phase comprising release and release completion (inherently part of any telephone call, because at the end of the call the used connection is released) and a record including a telephone number, a communication start and end (billing according the time used 4:19-25 and distance, inherently utilizing an originator telephone number, as all telephone billing is done according the originator telephone number).

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White also teaches using SS7 signaling to set up and release calls through IP network (using Common Channel Interoffice Signaling (CCIS) through STP 80 as shown on Fig. 2 and 5:8-5:36. SS7 is known as a current version of CCIS, utilizing Signaling Transfer Points STP).

White does not teach call sets directly receiving IP packets and using IAM, ACM, CPG, ANM, REL and RLC messages and using User to Network Interface (UNI) and Network to Network Interface (NNI).

Black teaches using IAM, ACM, CPG, ANM, REL and RLC messages for an ISDN call set up and release process in SS7 environment, including User to Network Interface (UNI) and Network to Network Interface (NNI) on pages 223-248.

Edholm teaches telephone sets directly receiving and transmitting IP packets (IP telephones 100 directly connected to Internet 130 on Fig. 1 and 4:20-30 and equipped to transmit and receive IP packets).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using IP telephones of Edholm and IAM, ACM, CPG, ANM, REL and RLC messages and User to Network Interface (UNI) and Network to Network Interface (NNI) of Black to the system of White to reduce the cost of telephone calls by utilizing IP telephones directly connected to Internet and improve the system operation with set up and release of an ISDN call with SS7 signaling in IP environment, as shown diagrammatically 162 and 164 on Fig. 4 and 10:4-12.

28. Regarding claim 443, 445-447, Black teaches UNI and NNI as communication connections for ISDN system operating with SS7, page 223, and response messages like Acknowledgment and Response messages, listed on pages 224 and 226.



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29. Claims 419, 430, 431 and 432 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Farris (US 6,195,425) in view of Black (ISDN and SS7, Prentice Hall, 1997, pages 223-248).

30. Regarding claims 419, 430 and 431, Farris substantially teaches the limitations of the claims:

a terminal to terminal communication control method with employment of an IP transfer network (telephone A to telephone B communication control method, shown on Fig. 11, wherein the telephones are communicating through Internet 216, an IP network, 22:12-62), wherein:

a communication line for a telephone communication connection control is separated from voice communication line (utilizing out of band signaling SS7, wherein a voice channel and a signaling channel are separate 7:53-8:52) between a termination gateway equipped with encapsulation function and relay gateway (gateways, shown on Fig. 11, comprising SP 200 and router/relay 218 for telephone A and SP 202 and router/relay 220 for telephone B, as routers comprise encapsulating function and routing capabilities disclosed in the dialing of a typical call 23:14-24:14, including encapsulation 23:37-40); and

a telephone communication is carried out between two telephone sets via a telephone set 1 (telephone A), a termination gateway equipped with encapsulation function, a relay gateway (gateway comprising SP 200 and router 218), interface communication line (interface between the network nodes, inherently part of any network), a public switched telephone network (Local exchange carrier LECs on Fig. 11 and 22:12-22) and telephone set 2 (telephone B).

Farris does not teach interface communication line as Network to network Interface (NNI).

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Black teaches interface communication line as Network to network Interface (NNI) to connect nodes of a network on page 223.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add interface communication line as Network to network Interface (NNI) of Black to the system of Farris to implement ISDN calls in SS7 environment, making the system compatible with widely used and popular ISDN standard.

In addition, regarding claims 430 and 431, Farris teaches two public networks LECs on Fig. 11, one comprising telephones A and B, and other comprising telephone D, two gateways, as disclosed above, terminating telephone B and telephone D 24:1-14, wherein the gateways belong/connected to the Internet 216 as shown on Fig. 11.

31. Regarding claim 420, Farris teaches gateways comprising routers inherently operating on routing tables, because routing tables comprising circuit identification/optimum routing path identification 23:50-54 are essential for routing in Internet, as shown on Fig. 11 and 23:14-67.

32. Regarding claims 421-423, Farris teaches router/controller 250 retrieving stored data tables including a signaling point address a telephone number of the destination (router/controller 250 retrieving access data tables, comprising information sufficient for completing the phone call, inherently including a signaling point address a telephone number of the destination, because this information is essential for the call completion 23:50-60).

33. Regarding claims 426-428, Farris teaches a gateway(as disclosed above) inherently including a voice control unit, comprising conversion operation of the voice signals into IP packets, wherein the IP addresses are provided by the gateway connected to the public network

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(LEC shown on Fig 11), because the conversion into IP packets and IP addresses are essential for the system operation to provide telephone service through Internet.

34. Regarding claims 432 and 433, Farris substantially teaches the limitations of the claims (see claims 419, 430 and 431 rejection above).

Farris does not teach setting up and interrupting telephone calls comprising IAM, ACM, CPG, ANM, REL and RLC messages.

Black teaches setting up and interrupting telephone calls comprising IAM, ACM, CPG, ANM, REL and RLC messages (connection management operation shown on Fig. 13-2, comprising IAM, ACM, CPG shown as CP, ANM, REL and RLC messages used for ISDN call set up and disconnection, disclosed in details on pages 224-236.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add ISUP messages and operations of ISDN and SS7 call set up and disconnection of Black to the system of Farris to make the system compatible with widely used and popular ISDN and SS7 standards.

Regarding claim 433, Farris in view of Black does not teach omitting release complete RLC message.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to omit release complete RLC message in the system of Farris in view of Black to increase the speed of the system, by eliminating a period of time spent waiting for the confirmation message RLC and open a new connection earlier.

35. Claim 444 is rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Black and Edholm in further view of Champa (US 6,934,278).

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White in view of Black and Edholm teaches all the limitation of parent claim 442.

White in view of Black and Edholm does not teach using H323 to control communication.

Champa teaches using Internet for video transmission (communication over Internet on Fig. 3 shown on Fig. 4 and 5 4:36-50) and H323 termination units (multimedia interface 110, comprising IP telephone gateway 116 on Fig. 4, including H323 voice packetizer 156 on Fig. 5 and 5:5-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using the H323 system for transmission of Champa to the system of White in view of Black and Edholm to make the system compatible with an important and popular standard H323.

36. Claims 393, 394, 398, 399 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Voit (US 6,104,711) in view of Champa (US 6,934,278).

37. Regarding claims 393, 398 and 399, Voit substantially teaches the limitations of claims:

A terminal to terminal communication connection control method with an IP network (communication system shown on Fig. 1 and 6:53-67 and 8:3-45, wherein IP network is Internet 31), wherein:

Voice and image apparatus 1 (Personal computer 35 on Fig. 1 and 7:20-50, wherein PC 35 comprises voice communication capabilities, utilizing microphones and speakers and image capabilities, utilizing PC monitor), which is indirectly connected to a network node apparatus (PC 35 is indirectly connected through internet server 33 to one of inherent Internet nodes, because Internet comprises numerous nodes, shown on Fig. 1) inquires a host name of voice and image apparatus 2 (computer 21 with voice capabilities 7:40-50 and monitor) to an IP image

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dedicated domain name server inside an IP network (utilizing translation tables of domain name server 51 on Fig. 1 and 9:5-40) via a media router 1 (internet access server 33 on Fig. 1 and 7:51-8:2) and obtains IP address of said voice apparatus 2 (computer to computer call process to obtain the computer IP address 10:20-39), then said voice and image apparatus 1 sends voice data to said voice and image apparatus 2 via media router 1, the IP network and said media router 2 (internet access server 27 on Fig. 1), to carry out a voice communication between apparatuses 1 and 2 (establishing a call from an ordinary phone to a computer 16:34-45).

Voit does not teach using the system for image/video transmission and H323 termination units.

Champa teaches using Internet for video transmission (communication over Internet on Fig. 3 including multimedia interface with video signal interface shown on Fig. 4 and 5 4:36-50) and H323 termination units (multimedia interface 110, comprising IP telephone gateway 116 on Fig. 4, including H323 voice packetizer 156 on Fig. 5 and 5:5-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using the system for image transmission of Champa to the system of Voit to add an important and popular feature to the system.

In addition, regarding claim 398, Voit teaches an IP terminal and a dependable type of IP telephone connected via communication line to first/second gateway (computer 21 and a voice telephone related portion of the computer comprising microphone 23 and speaker 25 on Fig. 1 and 7:41-55 connected to internet access server 27 through a dial-up connection Fig. 1 and 7:55-62) to establish terminal to terminal communication (communication between PC 21 and similar PC 35 on Fig. 1 and 7:52-67).

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Regarding claim 399, Voit teaches a plurality of gateways provided with interface functions that can be adapted to various sorts of telephone communication procedures (Internet servers comprises modem, ISDN or LAN interfaces for two-way communication over Internet 7:1-17).

38. Regarding claim 394, Voit substantially teaches the limitations of claims:

A terminal to terminal communication connection control method with an IP network (communication system shown on Fig. 1 and 6:53-67 and 8:3-45, wherein IP network comprises Internet 31 and Internet access servers 33 and 27), wherein:

Voice and image apparatus 1 (Personal computer 35 on Fig. 1 and 7:20-50, wherein PC 35 comprises voice communication capabilities, utilizing microphones and speakers and image capabilities, utilizing PC monitor), which is directly connected to a network node apparatus in said IP network (PC 35 is directly connected to a network node: Internet server 33 as shown on Fig. 1) inquires a host name of voice and image apparatus 2 (computer 21 with voice capabilities 7:40-50 and monitor) to an IP image dedicated domain name server inside an IP network (utilizing translation tables of domain name server 51 on Fig. 1 and 9:5-40) via a media router 1 (internet access server 33 on Fig. 1 and 7:51-8:2) and obtains IP address of said voice apparatus 2 (computer to computer call process to obtain the computer IP address 10:20-39), then said voice and image apparatus 1 sends voice data to said voice and image apparatus 2 via media router 1, the IP network and said media router 2 (internet access server 27 on Fig. 1), to carry out a voice communication between apparatuses 1 and 2 (establishing a call from an ordinary phone to a computer 16:34-45).

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Voit does not teach using the system for image/video transmission and H323 termination units.

Champa teaches using Internet for video transmission (communication over Internet on Fig. 3 including multimedia interface with video signal interface shown on Fig. 4 and 5 4:36-50) and H323 termination units (multimedia interface 110, comprising IP telephone gateway 116 on Fig. 4, including H323 voice packetizer 156 on Fig. 5 and 5:5-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using the system for image transmission of Champa to the system of Voit to add an important and popular feature to the system.

39. Claims 402, 403, 413, 415, 436-441, 448-466 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over White in view of Reshef (US 6,321,337).

40. Regarding claims 402, 413, 436, 448, 451, 454, 458, 461 and 464 White substantially teaches the limitations of claim 434, comprising a terminal to terminal communication control through an IP network telephone sets 100 and 118 connected to respective routers/gateways 104 and 116 on Fig. 4, encapsulating voice call data into an IP packet with an external address (obtaining an IP address and establish Internet connection 8:35-67) and controlling the telephone communication, including inherent connection release, by keeping the record of telephone connections for the purpose of billing (timed based billing, inherently comprising a connection start time and release time to identify the equipment used time 10:10-20).

White does not teach adding an internal address to the packet at the logical terminal connected to the router by an IP communication line and keeping the external and internal addresses in an address management table inside the logical terminal.

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Reshef teaches adding an internal address to the packet at the logical terminal (inherently part of the system, because Reshef teaches wrapping the outgoing messages from external network 16 in security gateway 10 on Fig. 1b into respective native protocols 9:11-65, including IP) connected to the router by an IP communication line (lines 22 on Fig. 1b and 7:43-46) and keeping the external and internal addresses inside the logical terminal (inherently part of the system, because keeping the external and internal addresses is essential for the protocol conversion to ensure two way communication 9:10-65).

Official notice is taken that keeping the addresses in a management table is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add an internal address to the packet at the logical terminal connected to the router by an IP communication line and keeping the external and internal addresses inside the logical terminal of Reshef and using a table for the addresses to the system of White to improve the system security by creating a secure internal environment.

In addition, regarding claim 402, 436, 448, 451, 454 Reshef teaches internal network as an IP network 9:10-25, and encapsulating/decapsulating the packets from the internal network as shown as encapsulating and decapsulating steps on Fig. 3b and 12:62-13:25.

In addition, regarding claims 458, 461, 464 White teaches a system of telephone communication over the Internet, the system not limited to two shown routers, therefore comprising numerous terminals/gateway routers, paired with numerous logical terminals of Reshef.



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In addition, regarding claim 413, White teaches communicating between the Autonomous Systems of companies as shown on Fig. 1 and 1:50-2:15).

41. Regarding claims 403 and 415, White teaches a system comprising Internet address data base/server 112 on Fig. 4 for providing IP addresses in response to the dialed phone number (9:10-32) and server 112 as domain name server.

42. Regarding claims 437 and 457, White teaches a system to carry out a telephone communication (Fig. 4).

43. Regarding claim 441, Reshef teaches an external and internal networks as IP networks (utilizing TCP/IP in both networks 9:10-25).

44. Regarding claims 449, 452, 455, 459, 462 and 465 White teaches a system wherein the connection phase is based on common channel signaling (common channel signaling portion of SS7 system, utilizing SSP(service switching point) capabilities in the gateway routers 9:65-10:20) including an address completion message (inherently part of the system, because SS7 protocol, utilized in the system of White, comprises an address completion message).

45. Regarding claims 450, 453, 456, 460, 463, and 466 White teaches a system wherein said call connection phase/call setting includes a answer/response confirmation message (caller is requested to confirm billing charges in response to the VRU request 17:57-18:11).

46. Regarding claim 404, White teaches setting the call by transmitting IP packet comprising a destination telephone number (9:37-41).

White does not teach transmitting the source phone number in the IP packet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the source phone number to the IP packet of the system of White in view of Reshef to

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simplify a response from the called side when the called phone is busy, as the busy signal is delivered to the calling telephone 100 (9:51-58).

47. Regarding claims 438 and 439, White in view of Reshef teaches all parent claims limitations (see the rejection of claim 436 above).

White in view of Reshef does not teach data multicasting operation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add data multicasting operation to the system of White in view of Reshef to utilize IP network well known multicasting abilities to send important/urgent message to numerous recipients.

48. Regarding claim 440, White in view of Reshef teaches all parent claims limitations (see the rejection of claim 436 above).

White in view of Reshef does not teach TV broadcasting operation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add TV broadcasting operation to the system of White in view of Reshef to utilize IP network well known multicasting abilities and well known techniques of transmitting TV over telephone lines to send provide TV broadcasting to numerous recipients.

49. Claim 429 is rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Kung (US 6,252,952).

Kung substantially teaches the limitations of the claim:

A termination gateway equipped with capsulation function (IP central station 200 and administration center 155 on Fig. 1 and 2, 5:30-65) wherein:

Said gateway includes a relay control unit (portions of IP central station 200 and administration center 155 on Fig. 1 and 2) and a network apparatus (IP central station 200 and administration

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center 155 on Fig. 1 and 2 inherent interfaces with IP network 120 as shown on Fig. 1 and 2, because IP interfaces are essential for the system interaction with IP networks);

Said network node apparatus owns both an IP encapsulation and inverse-capsulation functions (inherently part of central station 200 as shown on Fig. 2, because it converts telephone calls from PSTN 160 into Voice over IP calls for IP network 120, therefore providing by-directional encapsulation 6:35-50);

Said relay control unit includes a telephone administration server (system management server 216 on Fig. 2 and 8:15-27), a telephone number server (call manager server 218 comprising a customer data base with telephone numbers 10:54-67), a pilot telephone server (time of the day server 212 providing universal coordinated time for local time stamping 8:4-14), and a table administration server (DNS server 214, assigning IP addresses to activated devices, inherently creating tables to correlate devices with their IP addresses 7:25-60); and

Among IP packets entered from a media router a telephone call control packet is transferred to the relay control unit (IP packets from IP network 120 entering administration center 155 as shown on Fig. 1 and 5:47-53) and a voice IP packet is branched to a voice IP communication line (voice IP packets are directed to a line connecting central router 210 with IP network 120 as shown on Fig. 2).

Kung does not teach gateway as two separate devices: network node and relay control unit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate gateway of Kung into two separate devices as network node and relay control unit to improve the system maintainability by segregating two different functions of the gateway as encapsulation and management into network node and relay control unit.

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***Response to Arguments***

50. Applicant's arguments filed 04/24/06 have been fully considered but they are not persuasive.

On page 26 of the Response, Applicant argues that White does not teach transmitting and receiving an IP packet between call sets.

Examiner respectfully disagrees.

Applicant's arguments are directed to the limitations of claim 406 introduced by the current Amendment (04/24/06).

Edholm, not White teaches IP telephones transmitting and receiving IP packets (see claim 406 rejection above).

On page 27 of the Response, Applicant argues that Voit and Champa do not teach voice and image apparatus directly (claim 393) and indirectly connected to a network node apparatus in said IP network.

Examiner respectfully disagrees.

Applicant's arguments are directed to the limitations of claims 393 and 394 introduced by the current Amendment (04/24/06).

Limitations, comprising direct and indirect connection of voice and image apparatus, are addressed in the current claim 393 and 394 rejections (Please see rejections of claims 393 and 394 above).

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On page 27 of the Response, Applicant argues that Voit and Champa do not teach limitation of claim 398 directed to “a dependent type IP telephone”.

Examiner respectfully disagrees.

Examiner did not give any patentable value to “a dependent type IP telephone”, as this limitations are not understood in the context of the claim (see claim 398 rejection as indefinite above).

On page 28 of the Response, Applicant argues that computers 21 and 35 of Voit do not comprise voice and image apparatus of claim 398.

Examiner respectfully disagrees.

Voit teaches Personal Computers 21 and 35, each comprising a microphone, a speaker and a monitor as shown on Fig. 1 and 7:30-67. Therefore PCs 21 and 35 are voice and image apparatuses.

Examiner did not consider microphone and speaker as two separate devices, but referred to PC 21 as a terminal and PC 35 as a voice and image apparatus in communication. As PC 21 and 35 are identical, PC 21 can be identified as a voice and image apparatus and PC 35 as a terminal.

On pages 29-34 of the Response, Applicant argues that the previous Office action rejections are not practicable.

Examiner respectfully disagrees.

Claims 402, 403, 413-415, 434, 436-441 and 448-466 were rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over White in view of Reshef. White teaches

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Internet 106 on Fig. 4 as IP transfer network, inherently including two or more network nodes or three or more logical terminals interpreted as network nodes. Internet is a well known and practicable global IP network comprising thousands of network nodes.

In addition, claim 413 comprises limitations directed to subject rejected in the previous and current Office actions as indefinite (see claim 413 rejections under 35 U.S.C. 112 above).

On page 34 of the Response, Applicant requested evidence to support claim 429 rejection that separation of encapsulation function and administrative function in two devices is obvious.

Nelson (US 6,628,644) teaches two separate units IP telephone 22 and call manager 26 operating together, as shown on Fig. 1 and 3:5-20, wherein IP telephones comprise encapsulation and decapsulation functions and call manager controls the IP telephones.

Therefore the rejection of claim 429 is maintained.

### ***Conclusion***

51. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan  
Examiner  
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